

**JULY 27-28
2024**

To our Bay Area community:
Thanks to the fans, the hackers,
the restorers, the preservers, the players,
the tinkerers, the hobbyists, the artists,
and all those who keep classic games alive.

Have an amazing CAX weekend!



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Established 1992
Emeryville, CA

Show Terms and Conditions



The California Extreme show floor is a hands-on museum made up of equipment owned and maintained by private collectors. Much of it is antique, delicate and/or irreplaceable. You are welcome to play and enjoy the machines, but must be respectful with the machines and hotel and show property. No abuse will be tolerated.

No food or drinks are allowed in the convention center area at any time. All food and drinks may be enjoyed only in the hotel areas (that is, on the hotel side of the double sliding doors leading into the convention center) or outside.

Be courteous to other attendees. When other people are waiting for a game you are playing, please let them play once your game has finished.

Wristbands must be worn at all times.

Children must be accompanied by and supervised by an adult at all times inside the show.

California Extreme reserves the right to refuse admission to anyone.

Smoking is not allowed inside the show area.

Tickets may not be resold or transferred to anyone without prior permission from the show.

I understand that attending public events may pose some risks to me. Accordingly, I assume all risks and agree to hold California Extreme harmless.

All concerns about these terms and conditions must be addressed before completing registration. Please contact us at info@caextreme.org.

Speakers & Seminars

Pinball Museums – Keeping Pinball Alive

Pacific Pinball Museum Founder Michael Schiess. Pacific Pinball Museum Executive Director Evan Phillippe

Join the non-profit Pacific Pinball Museum's founder Michael Schiess and Executive Director Evan Phillippe for an overview of what separates a museum from a barcade, and how an important mission of preservation and universal access helps the amazing game of pinball survive into the 21st century and beyond.

How to Play Pinball (2 sessions)

Rick Stetta

Pinball playing legend and multiple time world champion Rick Stetta returns for his highly informative session to help you learn the techniques he uses to get those champion level scores.

Andrei Massenkoff

Schoolteacher and 2011 World Pinball Champion, Andrei Massenkoff, will show you how. How do you think they do it? I don't know - what makes them so good? From basic to world-class methods, learn the art of pinball techniques and strategies so you can play your best and have even more fun playing pinball! Q & A session will follow.

Developing Jersey Jack's Elton John Pinball

Steve Ritchie, and Duncan Brown
Hear the tales of the mechanicals, electron-

ics, software, and art work of the game from these industry veterans. They have collected stories, ideas, and perhaps a few pictures over their decades making pinball machines. You never know what might happen, but it is sure to entertain.

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A look behind the scenes of the many legal disputes involving GCC, including:

- Atari's 1981 lawsuit over Super Missile Attack, GCC's enhancement kit for Missile Command
- licensing Crazy Otto to Midway, which led to Ms. Pac-Man
- character trademarks and royalties
- forty years of controversies about Ms. Pac-Man and Jr. Pac-Man

From Mortal Kombat to Multiball - 30 Years of Game Development with MXV

Mike Vinikour, Stern Pinball
Imoto Harney, Marco Pinball

Explore the fascinating journey of Mike Vinikour, an Associate Game Developer at Stern Pinball. Beginning his career in 1994 at Williams Bally/Midway with titles like Mortal Kombat, Mike transitioned into pinball and has since contributed to iconic Stern games such as Stranger Things, James Bond 007, The Mandalorian, and Guardians of the Galaxy. This seminar delves into his career path, showcasing how his passion for gaming and expertise in arcade classics led him to become a pivotal figure in the pinball industry.



A Tale of 2 Krulls

Matt Householder, Dave Staugas, and Warren Davis

Join Matt Householder and Dave Staugas as they recount what it was like to design/code Krull for 2 very different systems: Gottlieb's coin-op hardware and the Atari VCS. Copies of a new booklet by Matt and Jeff Lee on Gottlieb's Krull will be for sale. Warren Davis will then join them for Q&A on their experiences in arcade gaming.

Are you a game designer? Help us shape Atari's future arcade games forum

James Knight, and James Anderson

The modern-day Atari has partnered with Alan-1 with a strategy to create new and innovative location-based entertainment experiences. Our first title is released at CAX 2024! Atari's Asteroids Recharged Arcade

is an updated version of the console release using Alan-1's arcade cabinet hardware and software technology called the Video Arcade System™. The system includes a custom I/O board (the i/o Tower) that significantly reduces input latency and allows for the integration of “virtual pinball” effects into modern game engines; such as a pinball knocker, centrifugal fans, large and small shaker motors, etc.

Knowing that great teams make better products, Alan-1 is openly asking for members of this community to join our game dev team to help us help Atari make new Arcade cabinets that are fun and innovative—that find a market in bar arcades, bowling alleys, and family fun centers around the world.

Play Asteroids Recharged and Alan-1's beta title Avian Knights at CAX and come to our forum to discuss how we can improve them. Also, discuss which titles we should make next or pitch any new game ideas you'd like to see made. Lastly, we are giving away an Asteroids Recharged at the show, so please come to learn more about our official CAX

Speakers & Seminars continued

Asteroids Recharged tournament and how to participate.

Peek inside the I,Robot ICY-II and 3D Video Hardware system

Jess Askey, John Manfreda, Dave Sherman

I,Robot was the FIRST video game platform to do realtime 3D rendering of objects due to the mad engineering of Dave Sherman and his MONDO hardware platform. The elusive Atari ICY-II custom ASIC has always been a mystery. Learn about this hardware, how it started, how it works and what it does and get a peek under the hood of one of the most fascinating video game hardware platforms in existence!

Atari Pinball Engineering: Stories and Prototypes

Steve Ritchie, Steve Calfee, Rich Adam, Mike Albaugh, Jeff Bell, Dan Kramer, Mike Hally, Dale Luck, Eugene Jarvis (remote), Owen Rubin (facilitator)

Join us for an engaging discussion about Atari pinball with the engineers and designers of the games, as they tell stories of their time in the Atari Pinball division. The story of a 20 year quest to finish the Atari pinball prototype Pipeline will be told.



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Pinball Tournaments

Main

Friday, July 26 – Qual – 6PM to midnight

Sat, July 27 – Qual – 10AM to midnight

Sun July 28 – Finals – check in by 9:30AM

Women's

Friday, July 26 – Qual – 6PM to midnight

Saturday, July 27 – Qual – 10AM to 2PM

Saturday, July 28 – Finals – 2:15PM

Classics

Friday, July 26 – Qual – 6PM to midnight

Saturday, July 27 – Qual – 10AM to 6PM

Saturday, July 28 – Finals – 6:15PM

Location

Main will be located in the Cypress room at the top of the escalator. Women's and Classics room TBD.

Stream

Finals for all tournaments will be streamed at

<https://www.twitch.tv/dri374>

Format Qualify

Main division will be card based. Cards are a collection of scores containing a total of 5 scores from unique machines. At any point during play or immediately after play has been completed, the player may elect to abandon their card by notifying the scorekeeper that they wish to void. This will void all of the scores recorded on the card, and the card will not be entered into the scoring system. No money will be refunded, but the player has no further obligation to complete the previously in-progress card and is free to purchase/play additional cards if they wish. Only one card may be opened at any time. Each player's best score on a machine will receive a point value based on its rank compared to all other recorded scores. The top

score earns 200 points, second place earns 195 points, third place earns 192 points and fourth and beyond earn one less point per position, i.e. 191 points down through 1 point. Any exact ties will receive the higher point total. A player's overall score for a card is the sum of their five ranked machine scores.

After totaling scores, the top 24 will be in the playoffs. The top 8 players will receive a bye. The next 16 players ranked outside of the IFPA top 1000 will go to B playoffs. Players with byes do not have to check in at the start of playoffs. They just need to be there when their round starts. In the event that they are not there when their round starts they will lose any game or order selection and their balls will be plunged on any games until they arrive.

The top youth (ages 12 and under) in the main Qual will receive a trophy. There will be prizes for the top 3 in Qual for this division. No playoffs for this division.

Women's Qual will be unlimited, best game format. Players can play as many entries as they want in an effort to put up the best scores on a bank of games. The top score earns 200 points, second place earns 195 points, third place earns 192 points and fourth and beyond earn one less point per position. Each player's top 4 (subject to change) scores will count out of a bank of ~5 games. Top 8 to playoffs.

Classics Qual will be unlimited, best game format. Players can play as many entries as they want in an effort to put up the best scores on a bank of games. The top score earns 200 points, second place earns 195 points, third place earns 192 points and fourth and beyond earn one less point per position. Each player's top 4 (subject to change) scores will count out of a bank of ~5 games. Top 16 to playoffs.

Head to the Cypress room for further details for cost, prizes and more tournament rules. Have a great time and good luck!

Protect your Glass with PINSHIELD!

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SPECIALS**

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SAKE LOU

RESTROOMS

BUFFET

LOBBY WEST

California Extreme

RESTROOMS

D

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California Extreme

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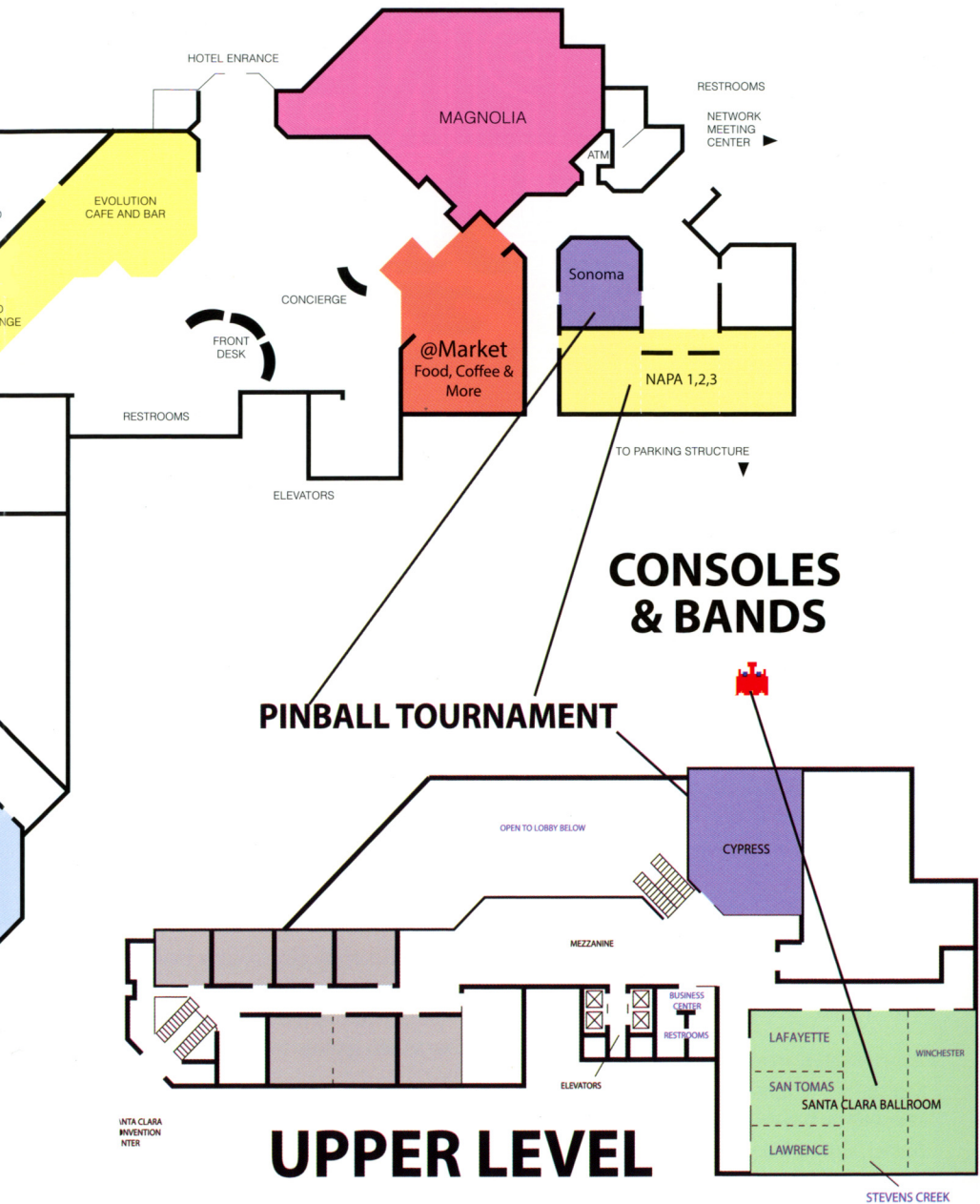
SANTA CLARA
CONVENTION
CENTER



SHOW HALLS

CALIFORNIA

SPEAKERS / SEMINARS



EXTREME MAP



CAX

BY DALE LUCK

ATARI PINBALL REUNION

ers came up with
better games to

compete with
the video games
and they were
starting to draw
blood. Atari
needed to not
only step up

their game in video, but they
felt they needed to do their own pinball
game.

CAX 2015 presented the ATARI PINBALL SHOWCASE where all 7 production pinball games and the prototypes Road Runner, Neutron Star, 4X4, and Alien Space were here to play.

Find all the Atari pinball games and exhibits in the second ballroom. Join us for a panel session on Saturday about Atari pinball engineering, stories, and Q&A.

Atari started working on pinball games around 1976 after the arcade industry seemed to have OD'd on Atari's bread and butter, the video game. Coins in the video game cash box were down after 3 years of black and white games. Pong was a hit and the market was flooded with Pong variations. During this time, pinball mak-

Pinball games up till that time were electro-mechanical wonders. Complex motors, relays and switches were the brains in those games. They were complex state machine super calculators that took decades for pinball makers to perfect.

But solid-state electronics had born the microprocessor now and Atari knew they would need to use their mastery in designing video games to design a pinball game.

Could Atari do pinball? Atari needed a proof of concept. They purchased a 1974 Williams Super-Flite EM game, removed the EM brains and developed a solid-state board to control it and be the display. Atari pinball was Flying High.



Atari settled on a 2 board system with both boards being in the main cabinet leaving the backbox empty except for lights to illuminate the backglass. This was great for the George Opperman, their main artist who created some fantastic backglass. The widebody playfields gave him even more to work with. This basic design was used in Atarians, Time 2000, Middle Earth, and Airborne Avenger.

The score display in the lower left of the playfield, the edge connectors, the lamp drivers, the rotary solenoids, and other things became problems. This led Atari to start work on a new generation of hardware..

In 1977 work started on the “New Hardware” It would fix all the technical problems as well as add a battery backed up ram to store High Score To Date, as well as settings and playing statistics. At this time, Atari created a new language called Pin-BOL Pinball Oriented Language, to control the new hardware.

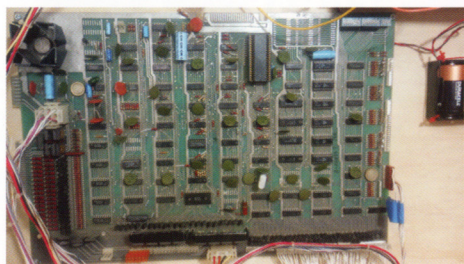
A surfing theme was chosen by engineer-

ing and thus was born the Pipeline project.

The single main board moves to the head. Large LED based score displays are at the bottom of backglass. This still allowed for nice unobstructed artwork. The use of the PinBOL macro language would speed up development since most of the code would be unchanged. The programmer would program the game using table descriptions for switches, lamps, solenoids, scores, and rules. The 6800 macro assembler would create the binary tables that the PinBOL OS would then use as the personality ROM. A single programmer could create software for a lot of prototype games.



At the time Pipeline was ready for play testing, marketing stepped in and said they didn't want a Surfing theme game. This is now 1978 and what was hot was Star Wars and outer space. Pipeline development was halted despite having produced the backglass, the playfield with art, cabinet art, wiring harnesses, drop targets, and hardware.



Pipeline turns into Space Riders. George Opperman created new artwork for the playfield and backglass. The playfield layout stayed nearly identical. But the New Hardware was not ready so they rewrote the code for the Gen 1 system and released Space Riders in Sept, 1978.



In Mar of 1979, Superman is released with the Gen 2 "New Hardware". The single board was split into 2 boards: a cpu board, and an I/O board.. The scores were moved from the bottom of the backglass to the right hand side.

Dan Kramer wrote a couple of great articles in the Fall 1986 "The Coin Slot" magazine



that has more info about Atari protos. It is a great read

Dirt Trak was being developed around the same time as Superman. It became Road Runner as Atari wanted to do licensed themes.

In 1979 work started on Hyper Space, a three multi-ball game. The name was changed to Alien Space because Asteroids used the same name.

1980, "Phase 3" hardware was designed to cost reduce Gen 2. A second Road Runner prototype was made using Phase 3. The scores on the right hand side were closer together and the credit/ball in play score was in



the lower middle. In fact they were now close enough so that the displays themselves could be plugged into the back of the cpu board and mounted directly behind the backglass. This blew my mind when I first saw a picture of this. I could see the backglass directly behind the cpu board as both swung out in the door.

Unfortunately, during the time of Superman production it was determined that the pinball business was not profitable for Atari. In fact for every pinball game made, Atari lost \$200.

It was decided to stop producing pinball games, but it was felt that Atari pinball engineering should continue working on new innovative designs and concepts in case they wanted to reenter the market.

Target Outpost, Frustration, and Heist, were games that combined video with pinball. Only drawings and descriptions of game play exist.

Dual Pin: Concept for a pinball game with two separate playfields, the 4x4 initial concept included dual playfields..

Phase 4 - 4th generation hardware

4th Quadrant with a 4x4 lamp matrix in the playfield was being developed in 1981. At the same time Monza, a race track game, was being developed.



These two merged into 4x4. Video games had regained much of their earnings potential with color, innovative, and compelling game play in the early 80s. It was felt that constantly having balls in play would compete with the video games where there is constant action and attention required to play the game. It was also timed play, with the ability to extend play with more money. In order to keep all

these balls in play Atari designed new custom silicon: the Pin Slice. This "Betty" chip could handle 4-8 switch inputs and control about 20-30 lamps and solenoids. A new pinball game would contain as many of these chips as necessary for all the I/O. 4X4 has 9 of these chips. A new language "PinGOL" was developed for this hardware. It used Forth for an OS; A playfield constantly being hammered by so many balls in play wouldn't last long so the playfield was a strong sheet of acrylic with artwork printed on the underside.



In 1982 4x4 got good reviews during play test at an arcade in Mountain View, CA. But In 1984, it would be the last pinball game developed by Atari after failing to convince Gottlieb to license the design.

The Pinball Hall of Fame in Las Vegas has a 4x4 and the Phase 3 Road Runner.



Consoles & Live Music

A fun filled feature rich experience all weekend long. Listen to awesome music, play rockband and sing Kara-oke! Play all sorts of console games that are setup on an array of old school TV's. Shop for the latest and retro console games from the fantastic collection of console game vendors - you could actually spend the whole

weekend in here and never be without something to do, play or purchase! You do not want to miss out on this part of California Extreme. CAX wristband required to enter and play. The Console and Live music room is upstairs in the Hotel in the Santa Clara Ballroom. Right off the escalator and straight ahead!



JULY 27 & 28
2024

CONSOLES & LIVE MUSIC

Santa Clara Ballroom (2nd floor above main hotel lobby) of
Santa Clara Hyatt Regency Hotel Tickets & info caextreme.org

Sat 7/27

Noon-
6pm

FREE PLAY
ROCKBAND

7pm

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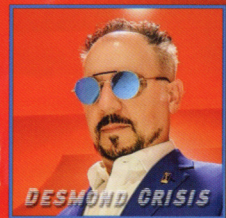
8:15
pm



9:30
pm

SUPER MADNES
HEAVY METAL SYSTEM

10:30
pm



Sun 7/28

Noon-6pm

FREE PLAY
ROCKBAND

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JULY 27



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RULES

- Double elimination bracket
- Winner keeps same character, loser can switch
- Best of 3 games; Grand Finals Best of 5 games

STREET FIGHTER II TURBO

Street Fighter II: Hyper Fighting

- Check-ins at 12:30 pm
- Event starts 1:00 pm

3rd STRIKE STREET FIGHTER III

Street Fighter III: 3rd Strike

- Check-ins at 3:30 pm
- Event starts 4:00 pm

• twitch.tv/riz0ne

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